

# **ZONING** AND **NATURAL RESOURCES**

In the City of Charleston

# Presentation Contents

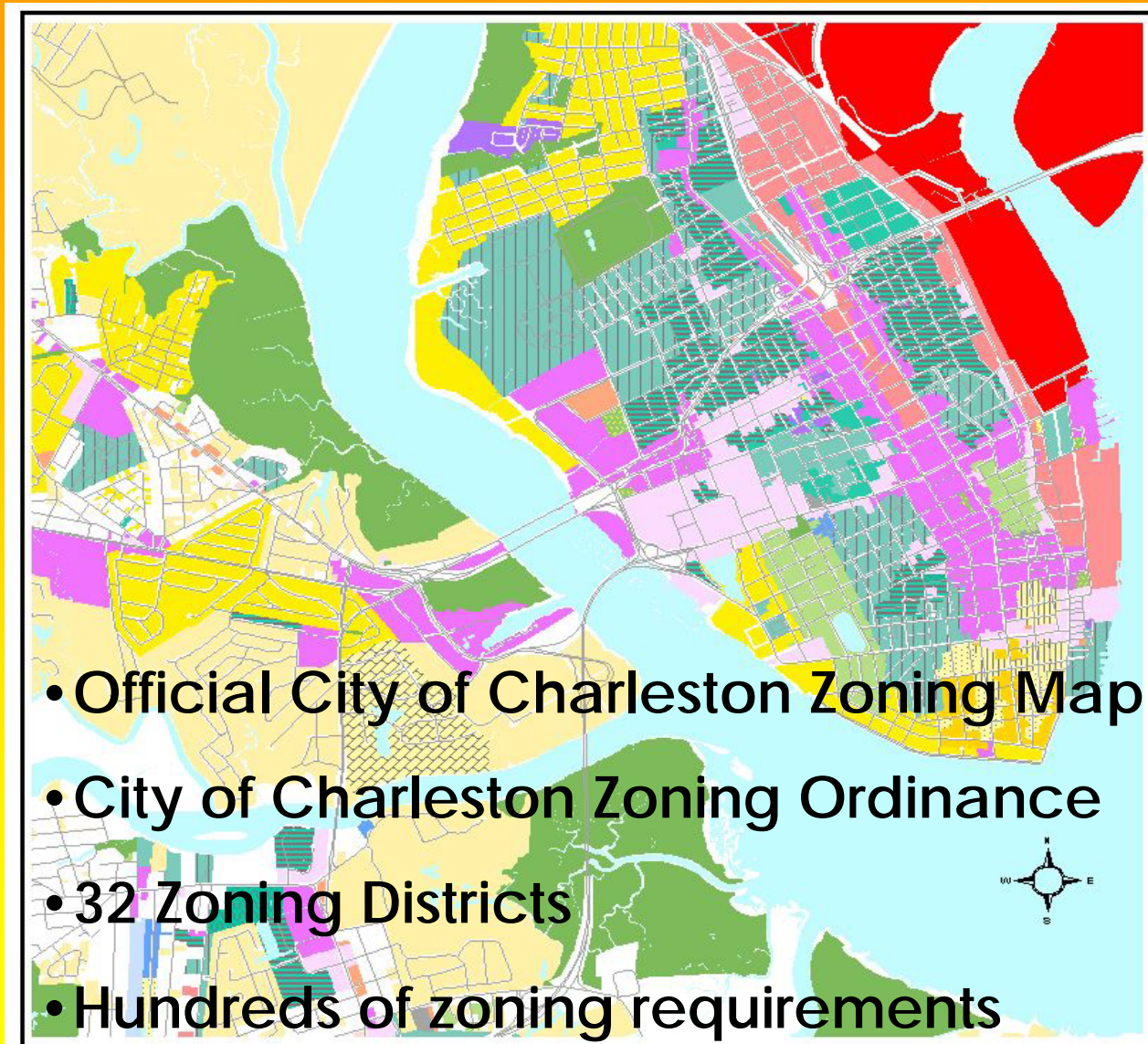
- Brief zoning background
- Zoning – what is it?
- Zoning & natural resources
  - Zoning standards that protect
  - Zoning standards that are flawed
  - Suggested zoning standards

# ZONING History

- NYC
  - The Equitable Building 1915
    - 40 stories
    - 7 acre shadow
    - Public outcry
  - 1916 Zoning Regulation
    - Addressed building height, bulk and setbacks



# City of Charleston Zoning



# What is ZONING?

“Zoning is the division of a community into zones or districts according to present and potential use of properties for the purpose of controlling and directing the use and development of those properties.” – *Encyclopedia of Urban Planning*

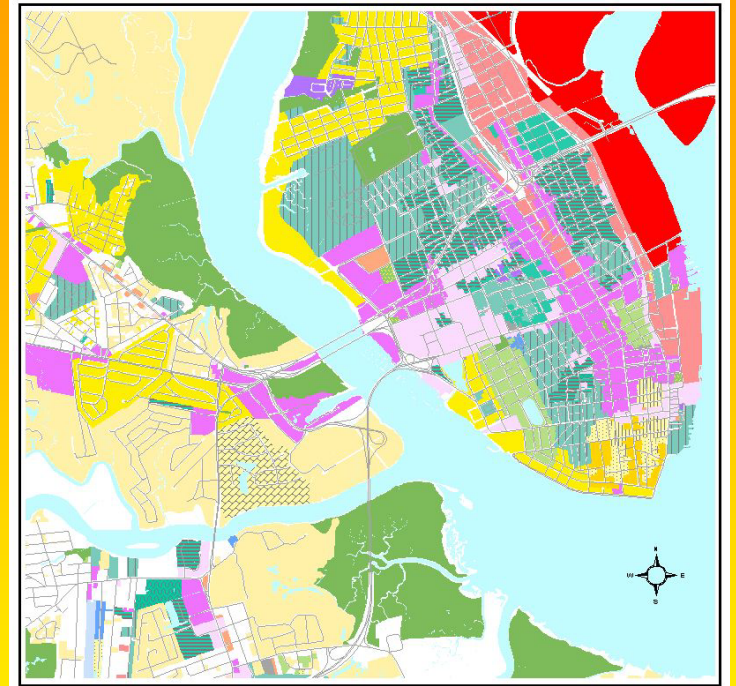


# What is ZONING?

Zoning is the

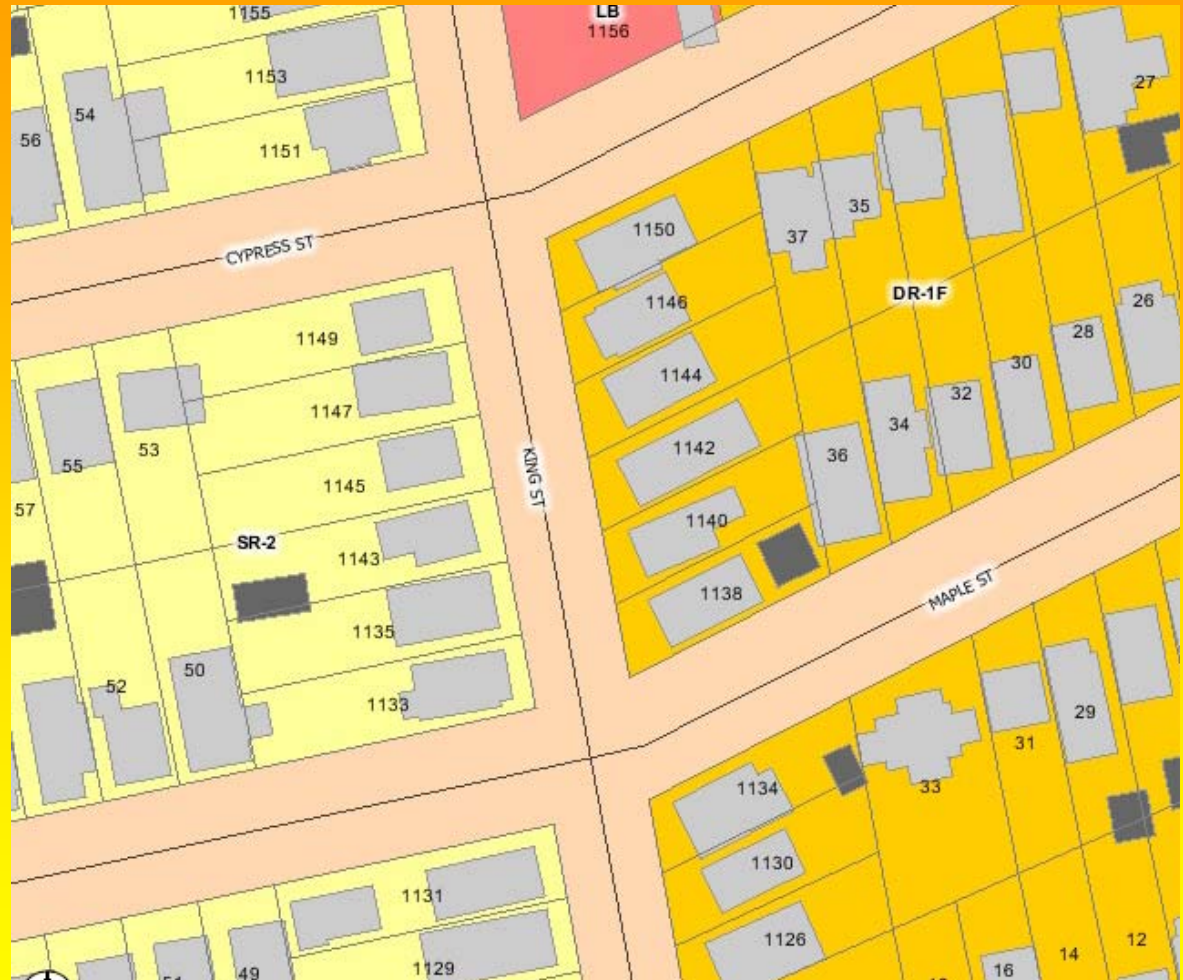
- ▶ What
- ▶ Where
- ▶ How
- ▶ When
- ▶ And sometimes Why

of land use.



# Example: Residential Zoning

- ▶ What
- ▶ Where
- ▶ How
- ▶ When



# Example: Residential Zoning

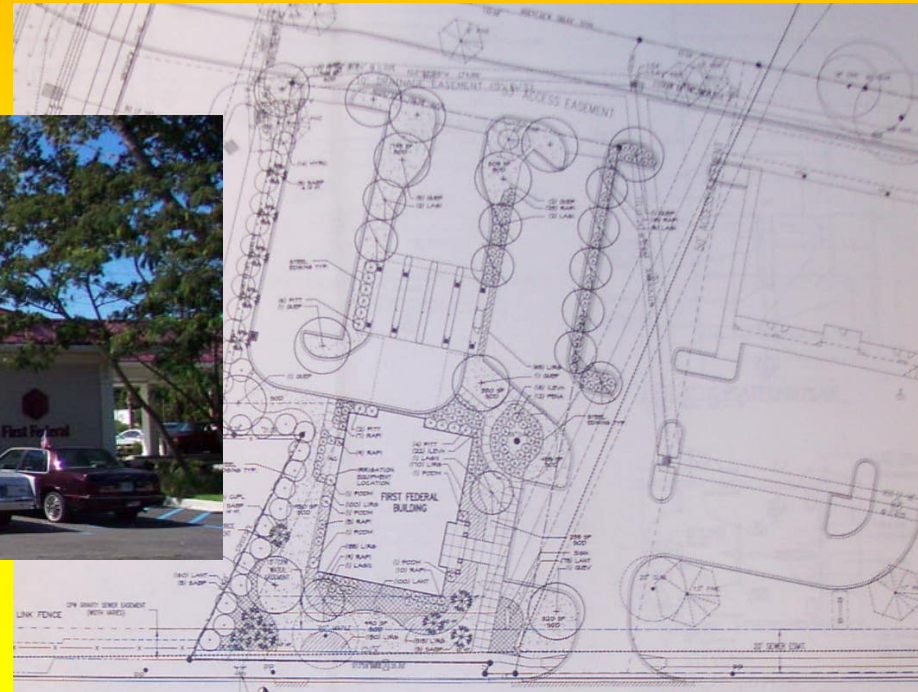
- ▶ What
- ▶ Where
- ▶ How
- ▶ When
- ▶ Why





# Example: Commercial Zoning

- ▶ What
- ▶ Where
- ▶ How
- ▶ When
- ▶ Why



# Example: Zoning & Natural Resources

- ▶ **What** - Standards for buffers, open space, zone districts, tree protection standards
- ▶ **Where** - All zone districts, specific locations within developments
- ▶ **How** - Ordinance gives direction on how to implement
- ▶ **When** - Upon land design and development
- ▶ **Why** - Protection of the natural environment and components of it

# ZONING & NATURAL RESOURCES

A multiple choice question:

ZONING =

- a. Protection of natural resources
- b. Destruction of natural resources
- c. No impact on natural resources
- d. All the above

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# Zoning & Natural Resources: Standards that PROTECT



- Tree ordinance
- Critical line buffer ordinance
- Planned Unit Developments (PUDs)
- Neighborhood District
- Conservation District

# Zoning & Natural Resources: Standards that PROTECT

## Tree ordinance

- Preservation of grand (24" +dbh) trees and protected (8" +dbh)
- Protective area setbacks
- Impervious setbacks
- Minimum number of trees for commercial properties
- Habitat protection
- Stormwater reduction





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**Grand tree (24"+dbh) preservation  
on residential property**





**Grand tree (24"+dbh) preservation  
on residential property**

**Protected tree (8"+dbh) preservation  
on commercial property**



# Zoning & Natural Resources: Standards that PROTECT

## Critical Line Buffer Ordinance



Prior to the buffer ordinance

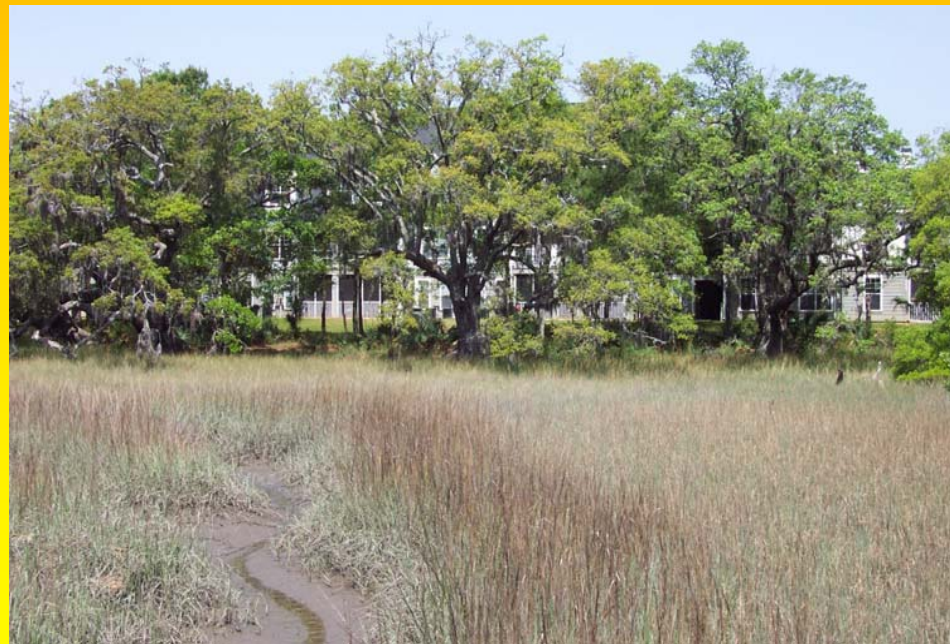


# Zoning & Natural Resources: Standards that PROTECT

## Critical Line Buffer Ordinance



Prior to the buffer ordinance



**\*After to the buffer ordinance\***

# Zoning & Natural Resources: Standards that PROTECT

## Critical line buffer ordinance

- Water quality - stormwater storage and filtration
- Erosion reduction
- Reduction in thermal heating of adjacent water
- Habitat preservation

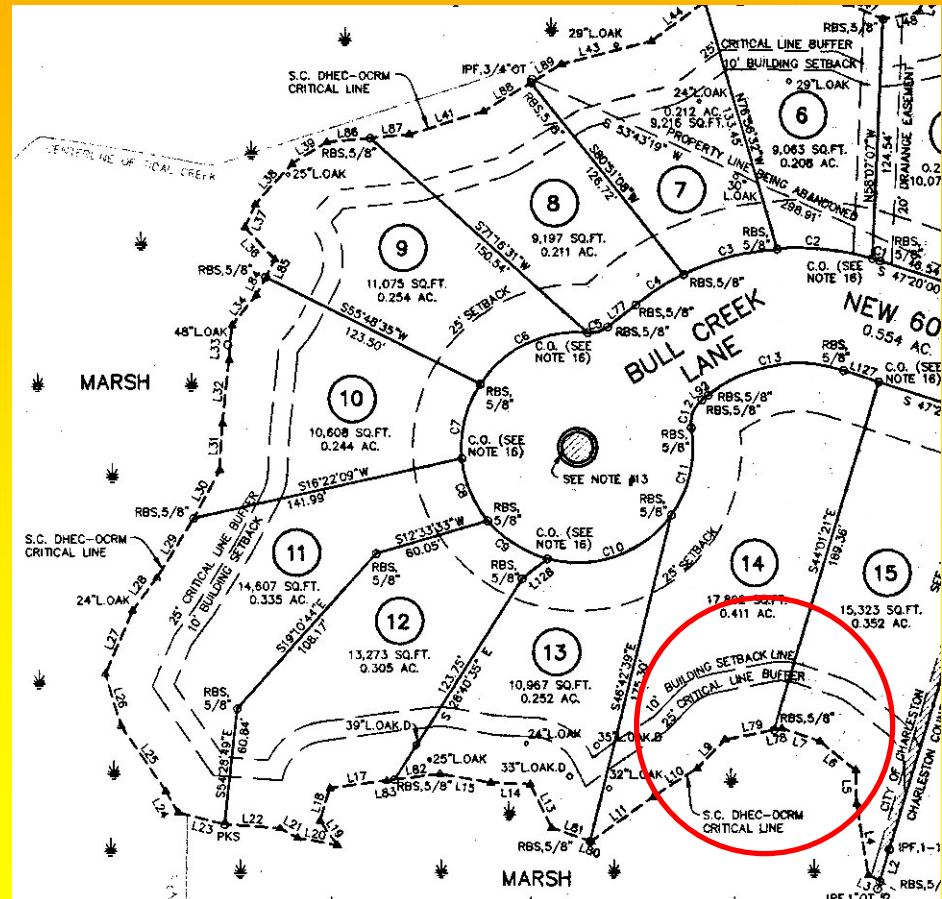




# Zoning & Natural Resources: Standards that PROTECT

## Critical line buffer ordinance

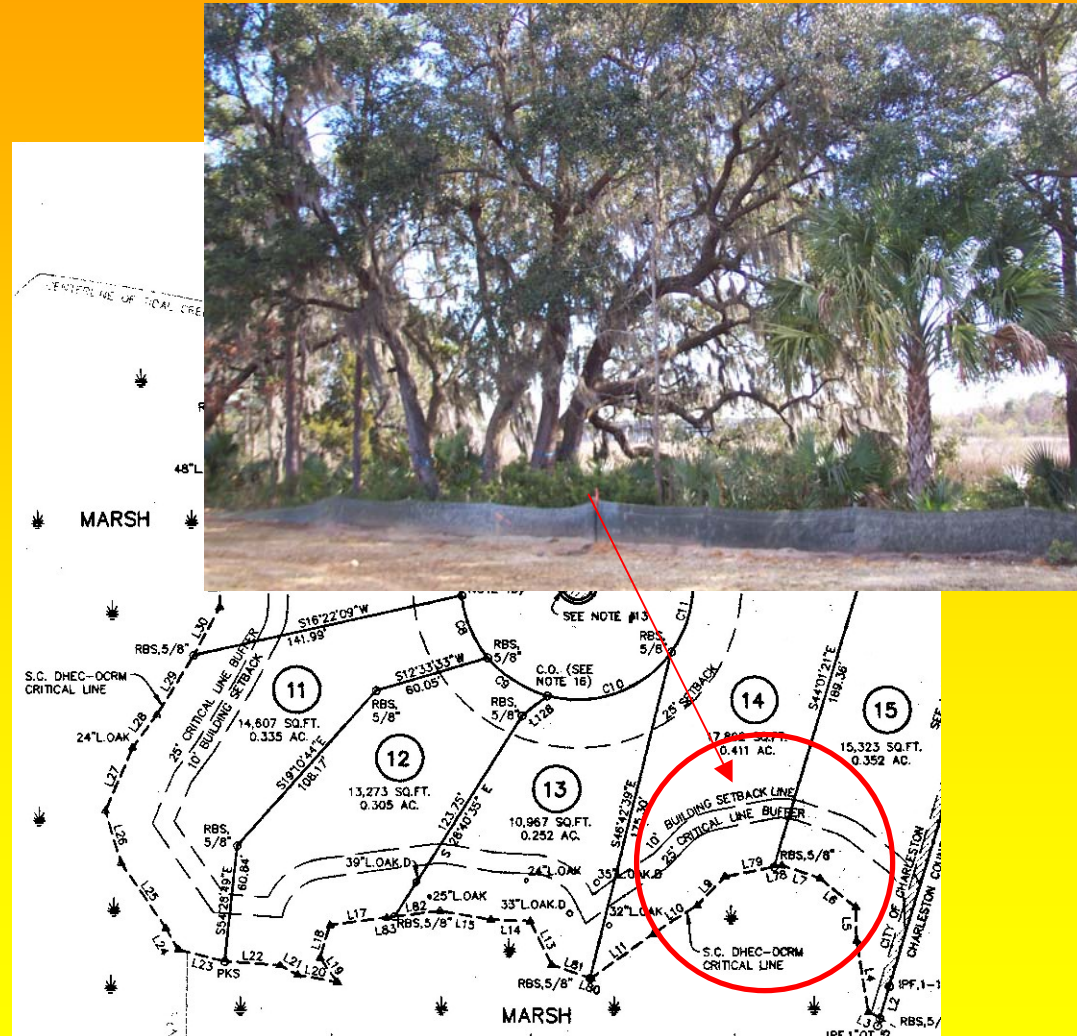
- Buffer adjacent to entire critical line
- Buffer width 25 ft – 40 ft
- Building setback from buffer (10 ft)
- Under jurisdiction of City of Charleston
- Applicable to all new developments as of September 12, 2000



# Zoning & Natural Resources: Standards that PROTECT

## Critical line buffer ordinance

- Prohibited - Manicured lawns, removal of protected trees, pruning shrubs below 3ft in height
- Allowed - Supplemental native species, water dependent structures, minimum utilities, stormwater management techniques (BMPs)



# Zoning & Natural Resources: Standards that PROTECT

## Planned Unit Development (PUD)

### Purpose:

- Provide design flexibility
- Encourage comprehensive planning
- Include open space
- Insure compatibility



# Zoning & Natural Resources: Standards that PROTECT

## Planned Unit Developments (PUDs)

- Flexible lot standards and design
- Clustering ability
- Open space requirement
  - 20% gross land area
- Flexible road standards
- Ability to incorporate mixed use



Courtesy of Seamon, Whiteside & Associates

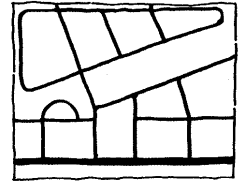
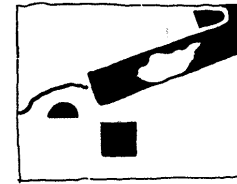
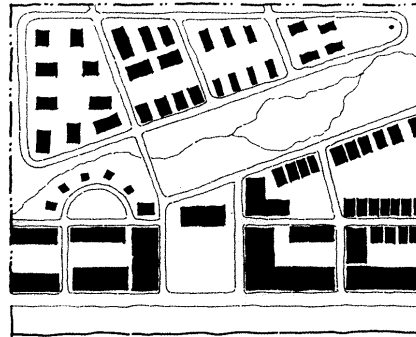


# Zoning & Natural Resources: Standards that PROTECT

## Neighborhood District

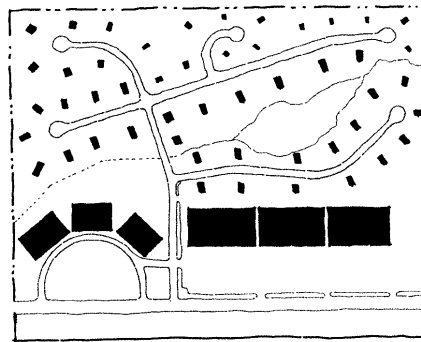
- Established guidelines
- Outdoor space requirements
- Flexible street standards
- Flexible lot standards
- Mixed use

**The Neighborhood District** : Design by public space types



Public outdoor spaces (above left) and street networks (above right) define the structure of the neighborhood.

**Conventional Suburban Development** : Design by product type



Development is built around single family, multi family, and retail product types, with no emphasis on public outdoor space.

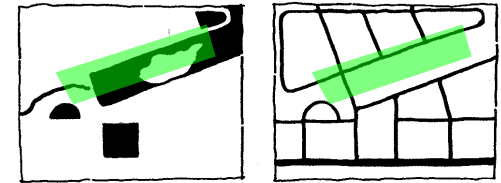
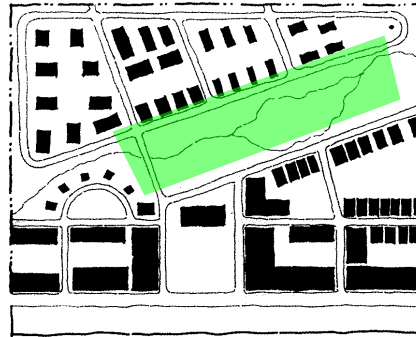
City of Charleston Planning & Neighborhoods

# Zoning & Natural Resources: Standards that PROTECT

## Neighborhood District

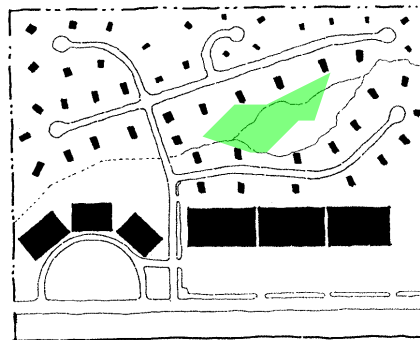
- Outdoor space requirements
  - 20% of gross area
  - Open space drives design
  - Various open space types
    - Plazas/squares
    - Parks & greens
    - Greenways
    - Conservation areas

**The Neighborhood District** : Design by public space types



Public outdoor spaces (above left) and street networks (above right) define the structure of the neighborhood.

**Conventional Suburban Development** : Design by product type



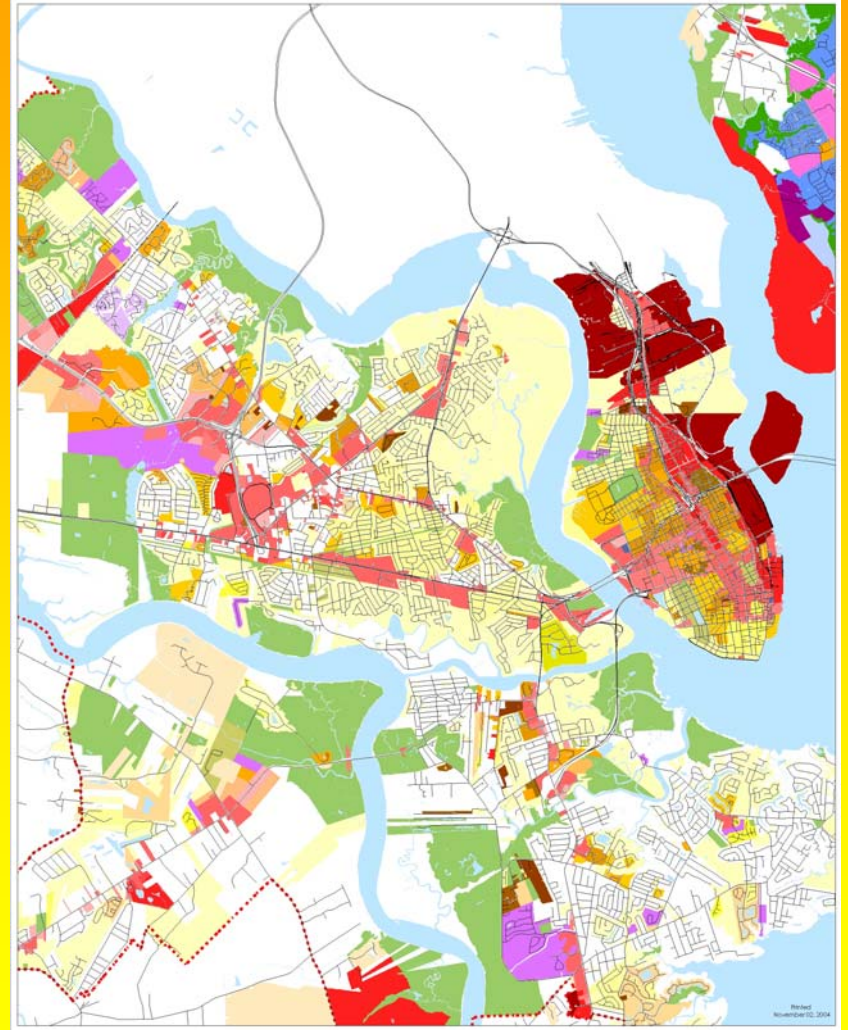
Development is built around single family, multi family, and retail product types, with no emphasis on public outdoor space.

City of Charleston Planning & Neighborhoods

# Zoning & Natural Resources: Standards that PROTECT

## Conservation District

- “A district designed primarily to protect and encourage the appropriate use of marshlands, forested areas, scenic areas, and agricultural areas...”

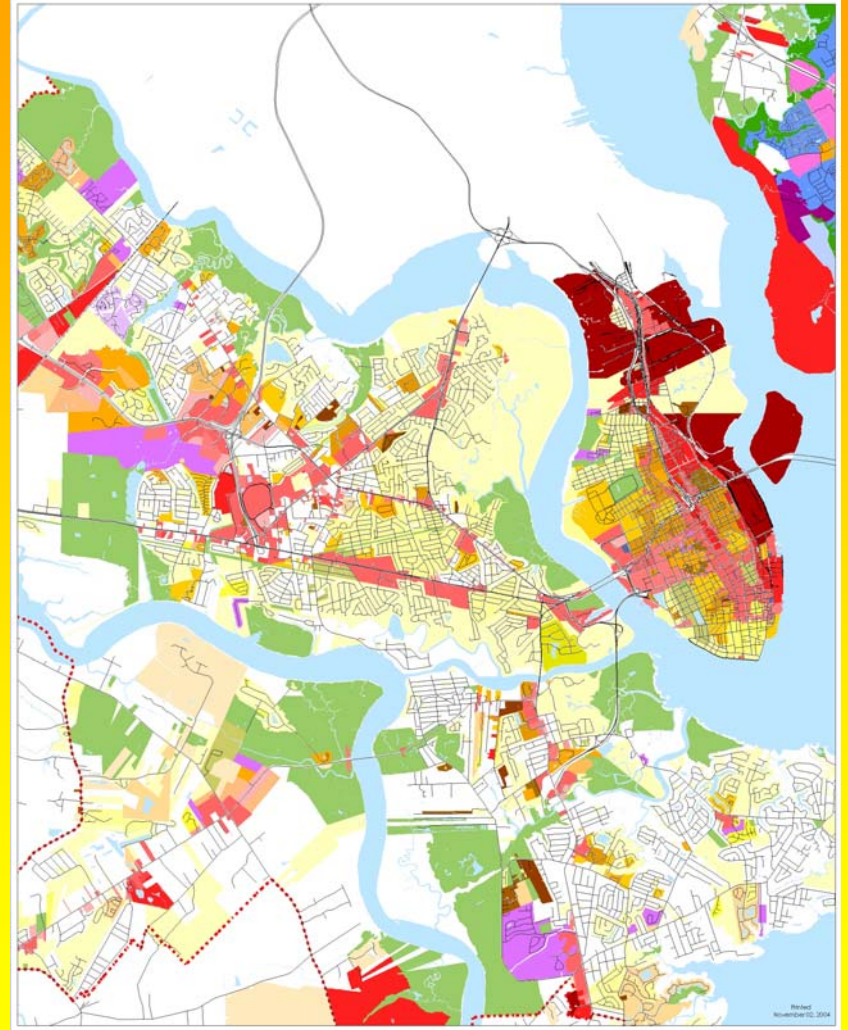




# Zoning & Natural Resources: Standards that PROTECT

## Conservation District

- Rural areas
- Near urban growth boundary (edge)
- Along waterways
- State/National park areas
- Agricultural lands

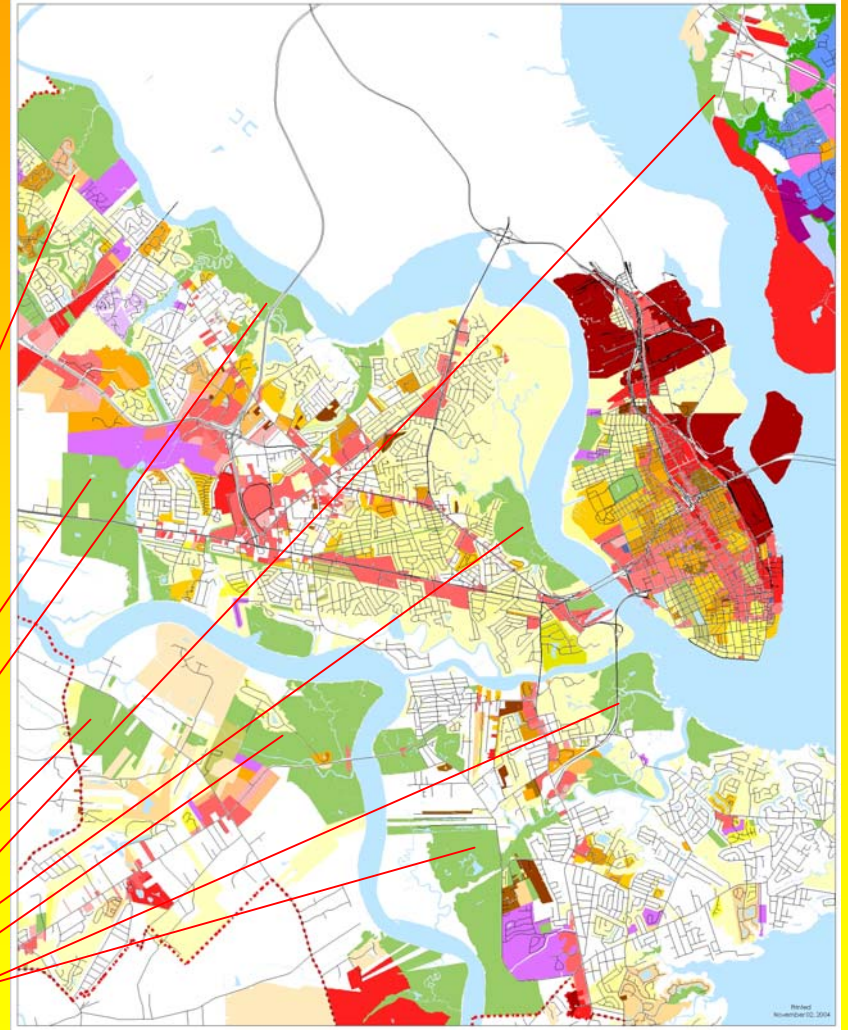


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**Conservation District**



# Zoning & Natural Resources: Standards that are FLAWED

- Tree ordinance
- Density vs. lot standards
- Lot occupancy vs. impervious surface
- Road standards



# Zoning & Natural Resources: Standards that are FLAWED

## Tree Ordinance

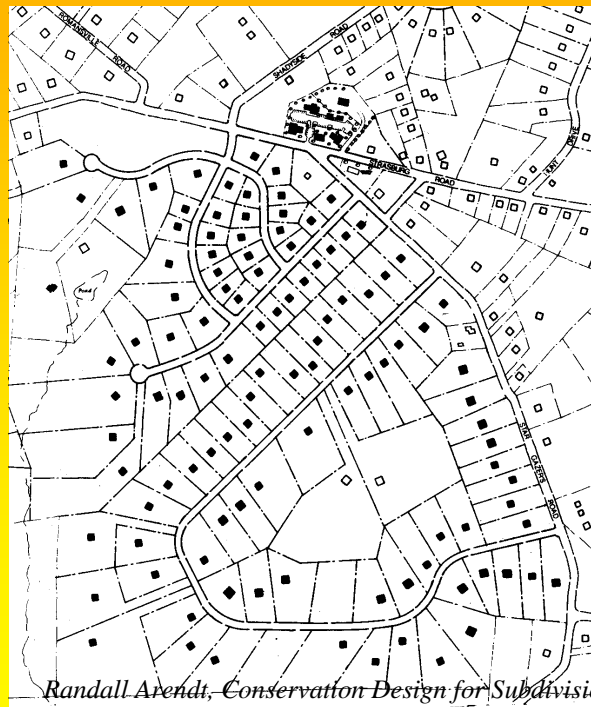
- Protects the specimen not the surrounding micro-ecosystem



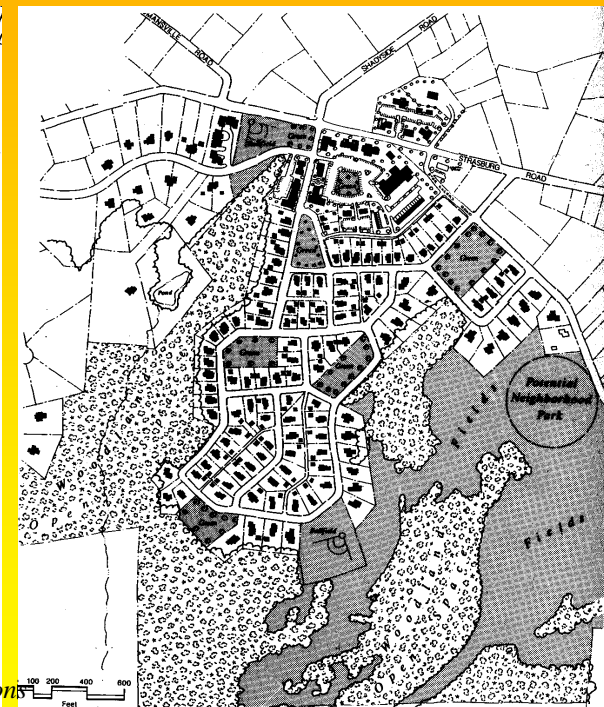
# Zoning & Natural Resources: Standards that are FLAWED

## Density

- Need clustering flexibility
- Focus on lot standards limits design flexibility
- Distribute density to preserve natural resources



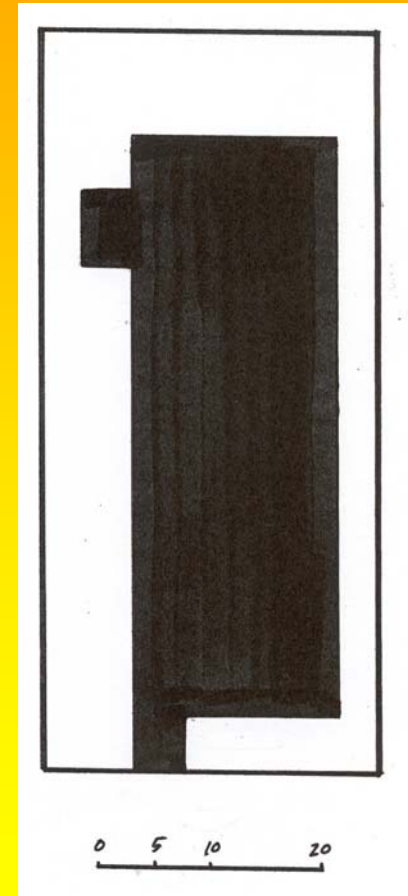
Conventional design



Clustering &  
preservation of natural  
area

# Zoning & Natural Resources: Standards that are FLAWED

Lot occupancy vs.  
impervious surface  
(an issue in environmentally  
sensitive areas)





# Zoning & Natural Resources: Standards that are FLAWED

## Road standards

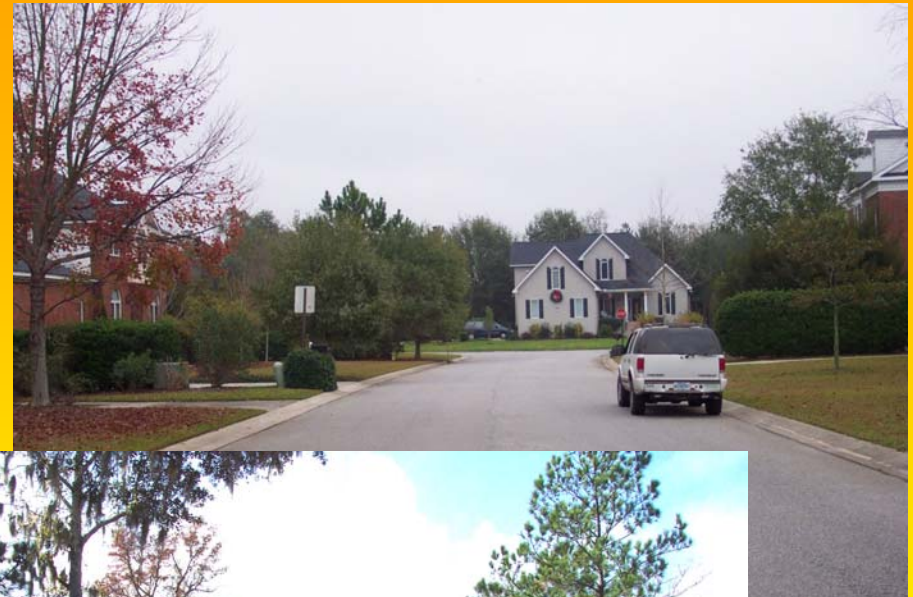
- Width
- No surface alternatives
- Swales are discouraged



# Zoning & Natural Resources: Standards that are FLAWED

## Road standards

- Width
- No surface alternatives
- Swales are discouraged
- Need to coordinate planning & engineering goals



# Zoning & Natural Resources: Recommended Zoning Ordinance Amendments

1. Freshwater wetland buffers
2. Improve open space definition and requirements
3. Alternative stormwater management techniques
4. Lighting standards
5. Improve PUD standards
6. Conservation design standards
7. Protect existing topography



# **Zoning & Natural Resources: Recommended Zoning Ordinance Amendments**

8. Revise road standards
9. Require open space/wildlife corridors
10. Encourage clustering
11. Facilitate Low Impact Development (LID)
12. Develop standards that promote new urbanism principles
13. Revise subdivision standards
14. Better utilize GIS capabilities

# QUESTIONS?